Abstract of the Disclosure

An optical waveguide ridge 14 has a side with a flat portion 14a stretching uniformly from a top of the ridge to a surface of a semiconductor substrate 12, the flat portion 14a being in contact with an exposed surface of the substrate 12. A p-type electrode 22 is extended from the top of the optical waveguide ridge 14 downward while in close contact with a dielectric film 16 furnished on the flat portion 14a of the optical waveguide ridge 14. The p-type electrode 22 is further extended over the dielectric film 16 on to the exposed surface of the semiconductor substrate 12 where an end of the electrode 22 is formed into a bonding pad 22a.